

LIST OF CONTENTS

NUMBER 1-5

A. K. Noor	1	Computational structures technology: leap frogging into the twenty-first century
P. Saint-Georges, G. Warzee, Y. Notay and R. Beauwens	33	Problem-dependent preconditioners for iterative solvers in FE elastostatics
P. Ladevèze and N. Moës	45	Adaptive control for finite element analysis in plasticity
H. Cramer, M. Rudolph, G. Steinl and W. Wunderlich	61	A hierarchical adaptive finite element strategy for elastic-plastic problems
C. Chinosi and C. Lovadina	73	Remarks on partial selective reduced integration method for Reissner-Mindlin plate problem
N.-E. Wiberg, R. Bausys and P. Hager	79	Improved eigenfrequencies and eigenmodes in free vibration analysis
J. Aalto and M. Perälä	91	Built-in field equations for patch recovery procedures using weighted residuals
J. Aalto and M. Åman	119	Polynomial representations for patch recovery procedures
A. Lorenzana and J. A. Garrido	147	Analysis of the elastic-plastic problem involving finite plastic strain using the boundary element method
V. Sladek and J. Sladek	161	Modified Overhauser elements for approximation of boundary densities in regularized BEM formulations
H. J. Holl, A. K. Belyaev and H. Irschik	177	Simulation of the Duffing-oscillator with time-varying mass by a BEM in time
D. O'Dwyer	187	Funicular analysis of masonry vaults
M. Utku	199	An improved transformation for universal serendipity elements
J. A. Teixeira de Freitas and C. Cismaşiu	207	Numerical implementation of hybrid-Trefftz displacement elements
Ph. Bouillard	227	Admissible fields and error estimation for acoustic FEA with low wavenumbers
C.-C. Lin and H.-N. Huang	239	Vibration control of beam-plates with bonded piezoelectric sensors and actuators

L. Champaney, J. Y. Cognard and P. Ladèveze	249	Modular analysis of assemblages of three-dimensional structures with unilateral contact conditions
B. Burgardt and P. Cartraud	267	Continuum modeling of beamlike lattice trusses using averaging methods
H. Alaylioglu and A. Alaylioglu	281	Finite element and experimental bases of a practical bridge management and maintenance system
E. J. O'Brien and D. L. Keogh	295	A discussion on neutral axis location in bridge deck cantilevers
B. M. Lehane, D. L. Keogh and E. J. O'Brien	303	Simplified elastic model for restraining effects of backfill soil on integral bridges
J. W. Bull and C. H. Woodford	315	The effects of camouflets on subgrade surface support
J. S. Kuang and C. K. Chau	327	Dynamic behaviour of stiffened coupled shear walls with flexible bases
J. W. Bull and C. H. Woodford	341	The numerical modelling of crater repairs in airfield runways
M. B. Fuchs, M. Paley and E. Miroshny	355	The Aboudi micromechanical model for topology design of structures
S. Manoharan and S. Shanmuganathan	363	A comparison of search mechanisms for structural optimization
E. S. Kameshki and S. Syngellakis	373	Inelastic stability of rectangular frames by transfer matrices
A. V. Singh	385	Free vibration analysis of deep doubly curved sandwich panels
J. M. Bourinet and D. Le Houédec	395	A dynamic stiffness analysis of damped tubes filled with granular materials
J. S. Moita, C. M. M. Soares and C. A. M. Soares	407	Buckling and dynamic behaviour of laminated composite structures using a discrete higher-order displacement model
B. Jurkiewicz, J.-F. Destrebecq and A. Vergne	425	Incremental analysis of time-dependent effects in composite structures
Q-L. Zhang and U. Peil	437	Dynamic behaviours of cables in parametrically unstable zones

- | | | |
|--|-----|---|
| G. D. Gounaris and
N. K. Anifantis | 445 | Structural damping determination by finite element approach |
| C. T. F. Ross, M. W. Taylor,
W. D. Richards and
A. P. F. Little | 453 | Vibration of varying thickness circular cylinders under uniform external water pressure |
| P. Venini and C. Mariani | 465 | Reliability as a measure of active control effectiveness |
| S. Glodež, Z. Ren and
J. Flašker | 475 | Surface fatigue of gear teeth flanks |
| A. Mokhtar-zadeh and
A. Kaveh | 485 | Optimal plastic analysis and design of frames: graph theoretical methods |
| A. Kaveh and
A. Mokhtar-zadeh | 497 | Bandwidth optimization for rectangular matrices |
| A. Kaveh and G. R. Roosta | 511 | Cycle bases of graphs for sparse flexibility matrices |
| B. H. V. Topping and
B. Cheng | 519 | Parallel and distributed adaptive quadrilateral mesh generation |
| B. Kiss and A. Krebsz | 537 | On the Schur component preconditioners |
| J. P. B. Leite and
B. H. V. Topping | 545 | Parallel simulated annealing for structural optimization |

I Calendar

NUMBER 6

- | | | |
|---|-----|---|
| G.-Q. Li, K.-C. Hao, Y. Lu and
S.-W. Chen | 565 | A flexibility approach for damage identification of cantilever-type structures with bending and shear deformation |
| J. Ch. Ermopoulos | 573 | Buckling length of non-uniform members under stepped axial loads |
| P. Fernandes, J. M. Guedes
and H. Rodrigues | 583 | Topology optimization of three-dimensional linear elastic structures with a constraint on "perimeter" |
| L. P. Li, G. Cederbaum and
K. Schulgasser | 595 | A finite element model for poroelastic beams with axial diffusion |
| You-qun Zhao,
Zhong-sheng Liu,
Su-huan Chen and
Gui-yu Zhang | 609 | An accurate modal truncation method for eigenvector derivatives |
| P. Boisse, S. Perrin,
G. Coffignal and K. Hadjeb | 615 | Error estimation through the constitutive relation for Reissner-Mindlin plate bending finite elements |

S. Tizzi

**629 Free frequencies and modal shapes of cylindrical
vibrating composite structures**

I Calendar

